

INFORMATION PAPER

DASG-PPM-NC
19 March 2004

SUBJECT: Emerging Health Issues: Leishmaniasis among Soldiers in OIF/OEF

ARMY POSITION: Prevention and treatment of leishmaniasis among troops deployed to Southwest Asia is a top force health protection priority for the Army. Primary prevention is paramount to ensure readiness in an environment of leishmaniasis exposure. Secondary prevention involves methods and procedures for early identification and treatment of leishmaniasis. Treatment options are currently limited to the use of Pentostam™, amphotericin B, and ThermoMed™.

KEY POINTS:

a. From 1 January 2003 through 18 March 2004, 399 Soldiers deployed to Southwest Asia have been diagnosed with cutaneous leishmaniasis (CL), a parasitic infection of the skin transmitted by the bite of an infected sand fly. CL typically presents as one or more open skin sores that develop over weeks to months after a bite by an infected sand fly. While CL is not life threatening, the skin sores may result in permanent scarring.

b. Visceral leishmaniasis (VL) is a more serious, potentially fatal, internal form of the disease, infecting the liver, spleen and bone marrow. VL can occur ten days to several years after the infection. Two Soldiers have been recently diagnosed with VL in OIF/OEF.

c. There are no vaccines or medications effective for prevention of leishmaniasis.

d. Recognition and diagnosis may be delayed. Cases may not be identified until individuals are back in the United States. Major emphasis is placed on educating the individual Soldier on identification and treatment options while deployed and after returning to the Continental United States (CONUS).

e. Treatment with Pentostam™ requires evacuation to either Walter Reed Army Medical Center (WRAMC) or Brooke Army Medical Center (BAMC), the DoD referral centers for treatment of CL. The intravenous medication of choice, Pentostam™, is administered under an FDA-approved Investigational New Drug protocol. Depending on severity, treatment lasts ten to twenty days. Although treatment has proven to be very effective, side effects may include muscle and joint pain and pancreatic inflammation, all of which resolve when treatment is stopped. Eight Soldiers have failed treatment for CL and required repeated treatment. Thirty-four Soldiers are currently being treated for CL at WRAMC.

f. Although no cases of transfusion-acquired leishmaniasis have been reported in the US, all US personnel deployed to Iraq are deferred from donating blood for 12 months after departure from Iraq. Individuals diagnosed with leishmaniasis incur a lifetime prohibition on donating blood.

BACKGROUND:

a. Twenty cases of CL occurred among troops during Operation Desert Storm (ODS). In ODS, twelve Soldiers were diagnosed with VL and successfully treated at WRAMC.

b. In Southwest Asia, the sand flies are active and transmit the infection from March through November.

c. Of the Soldiers with CL for whom exposure information is available from OIF -1, slightly over 50% were exposed in central Iraq (especially the area northeast of Baghdad, near the Iranian border), 33% were exposed in northern Iraq (Tikrit, Mosul, etc.), and 10% in the vicinity of Tallil Airbase in southern Iraq. Both Soldiers diagnosed with VL are thought to have acquired their infections in Afghanistan.

d. Command emphasis is on personal protective measures and efforts to control wild dogs and rodents that harbor the infection. Personal protective measures include: application of repellent lotion containing DEET, proper wear of permethrin-treated uniforms, and sleeping under permethrin-treated bed nets or within screened enclosures.

LATEST RECAP:

Commanders are instructed to ensure that their personnel have adequate supplies of DEET, permethrin and bed nets and are trained and disciplined in their appropriate use for OIF-2.

An additional treatment facility at BAMC, Texas, is now open and approved for treatment of military personnel diagnosed with CL. A second type of treatment for CL currently being investigated is a mild, direct heat treatment to the skin lesion. Fifty-four Soldiers are currently enrolled a comparison study with Pentostam™ and ThermoMed™ treatments.

The first two cases of VL recognized in OIF/OEF have been recently diagnosed and treated.

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